



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/811,637

03/29/2004

Cordell R. Burton

26998-247823

4152

25764 7590 03/20/2008

FAEGRE & BENSON LLP
PATENT DOCKETING
2200 WELLS FARGO CENTER
90 SOUTH SEVENTH STREET
MINNEAPOLIS, MN 55402-3901

EXAMINER

LAUX, JESSICA L

ART UNIT

PAPER NUMBER

3635

MAIL DATE

DELIVERY MODE

03/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/811,637	Applicant(s) BURTON ET AL.	
	Examiner Jessica Laux	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 12/19/2007 have been fully considered but they are not persuasive. Applicant's arguments are not persuasive because the prior art of Hunter was not relied on for the teaching of the panel but rather the teaching of using a foam adhesive. Applicant's arguments pertain to the panel of Hunter and as such are not sufficient to overcome the rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art and Hunter (7168221) as referenced by Record (5927032) or Holloway (7100342) or Jonas (4125984).

Regarding claim 1: Applicant admits in the specification that it is known in the art to have a composite panel having an insulating core (where Record Holloway, Jonas and applicant, spec page 1) all disclose panels having insulation sandwiched between two rigid layers) and fenestration unit installed in the panel (where the steps of installing would inherently include the steps of creating an opening larger than the fenestration unit and positioning the unit inside the opening).

Hunter discloses insulating foam core panels for use in barrier construction of a building where the panels are secured and attached using a foam adhesive (17) which is delivered into a space between the panels and fixedly adheres the foam cores together.

It would have been obvious at the time the invention was made to modify the already known method of installing a fenestration unit in panel (as disclosed above as being known in the art) to include using a foam adhesive around at least a portion of the perimeter of the unit to secure the unit and panel because the foam adhesive provides a secure connection that further protects from water/moisture damage and provides additional insulation at an area that is known to require insulation (a fenestration opening in a wall/panel).

Regarding claims 2-5: The limitation in the claims regarding the percentage (ranging in the various dependent claims from 100-50%) appears to be a mere matter of design choice which fails to patentably distinguish over the prior art. Applicant has disclosed that several percentages would be acceptable, including that the adhesive provides the sole structural support and that it provides mere 50% of the attachment force. Such a range is clearly indicative of a lack of criticality to the instant feature. Moreover it appears that a foam adhesive that provides at least 50% of the attachment force either by itself or in combination with other fastening means would be acceptable and within the scope of applicant invention. The panel as in claim 1 with the foam adhesive as taught by Hunter would provide for at least 50% of the attachment force.

Regarding claim 6: The method of claim 1 comprising selecting a foam material that is compatible with a material of the insulating core of the composite panel (it is inherent and obvious to one of ordinary skill in the art to use an adhesive that is compatible with the material to which the adhesive will be applied).

Regarding claim 7: The method of claim 1 comprising fixedly adhering the foam material to at least one side surface of an outer layer of the composite wall panel at the rough opening (as seen in figure 4).

Regarding claim 8: The method of claim 1 comprising selecting a low expansion adhesive foam (Col. 2, line 41-42).

Regarding claims 9-10: The method of claim 1 as above, wherein the step of delivering a foam material into a space includes delivering the foam material around at least a portion of the perimeter or around the entire perimeter of the frame of the fenestration unit (where Hunter discloses using an adhesive on all of the joints and along the entire joint of the panel).

Regarding claims 11-13: Where applicant admits in the specification that it is known in the art to attach a fin on the frame of the fenestration unit to an outer surface of an outer layer of the composite panel and locating a sealant material between the fin and the outer surface of the outer layer and attaching the fin to the outer layer using fasteners.

Regarding claim 14: The method of claim 1 comprising delivering the foam material into recesses located in the perimeter of the frame (Hunter, figure 4).

Regarding claims 16-20: Admitted prior art in view of Hunter discloses the method as in claim 1 above, but is silent regarding where the panel and fenestration installation method occurs. However, applicant has not disclosed that the claimed limitations of fabricating and assembling either at a remote location or on site, provide and advantage, solve a stated problem or are for a particular purpose. Furthermore it appears that either location would be acceptable and result in the same product and therefore it appears to be a mere matter of obvious design choice to one of ordinary skill in the art to either assemble/fabricated on site or at a remote location as these are the only options and the method must be performed at one and/or the other.

Regarding claim 21: Applicant admits in the specification that it is known in the art to have a composite panel having an insulating core (where Record Holloway, Jonas and applicant, spec page 1, all disclose panels having insulation sandwiched between two rigid layers) and fenestration unit installed in the panel (where the steps of installing would inherently include the steps of creating an opening larger than the fenestration unit and positioning the unit inside the opening).

Hunter discloses insulating foam core panels for use in barrier construction of a building where the panels are secured and attached using a low expansion foam adhesive (17) which is delivered into a space between the panels and fixedly adheres the foam cores together.

It would have been obvious at the time the invention was made to modify the already known method of installing a fenestration unit in panel (as disclosed above as being known in the art) to include using a foam adhesive around at least a portion of the

Art Unit: 3633

perimeter of the unit to secure the unit (where Hunter discloses that the foam adhesive provides a primary structural attachment between units when substantially cured; Col. 2, lines 45-46) and panel because the foam adhesive provides a secure connection that further protects from water/moisture damage and provides additional insulation at an area that is known to require insulation (a fenestration opening in a wall/panel).

Regarding claim 22: Applicant admits in the specification that it is known in the art to have a composite panel having an insulating core, and Record, Holloway, Jonas and applicant (spec page 1) all disclose insulating panels for wall construction having a insulating core between two rigid layers, and fenestration unit installed in the panel (where it is inherent that the opening would be larger than the fenestration unit).

Hunter discloses insulating foam core panels for use in barrier construction of a building where the panels are secured and attached using a foam adhesive (17), which is delivered into a space between the panels and fixedly adheres the foam cores together.

It would have been obvious at the time the invention was made to modify the already known method of installing a fenestration unit in panel to include using a foam adhesive around at least a portion of the perimeter of the unit to secure the unit and panel because the foam adhesive provides a secure connection that further protects from water/moisture damage and provides additional insulation at an area that is known to require insulation (a fenestration opening in a wall/panel).

Regarding claims 23-26: The limitation in the claims regarding the percentage (ranging in the various dependent claims from 100-50%) appears to be a mere matter of

Art Unit: 3633

design choice, which fails to patentably distinguish over the prior art. Applicant has disclosed that several percentages would be acceptable, including that the adhesive provides the sole structural support and that it provides mere 50% of the attachment force. Such a range is clearly indicative of a lack of criticality to the instant feature. Moreover it appears that a foam adhesive that provides at least 50% of the attachment force either by itself or in combination with other fastening means would be acceptable and within the scope of applicant invention. The panel as in claim 1 with the foam adhesive as taught by Hunter would provide for at least 50% of the attachment force.

Regarding claim 27: The wall structure as in claim 22 above, comprising a foam material that is compatible with a material of the insulating core of the composite panel (it is inherent and obvious to one of ordinary skill in the art to use an adhesive that is compatible with the material to which the adhesive will be applied).

Regarding claim 28: The wall structure of claim 22 comprising fixedly adhering the foam material to at least one side surface of an outer layer of the composite panel at the rough opening (as seen in figure 4).

Regarding claim 29: The wall structure of claim 22 comprising selecting a low expansion adhesive foam (Col. 2, line 41-42).

Regarding claims 30-31: The wall structure of claim 22 as above, wherein the foam material is delivered around at least a portion of the perimeter or around the entire perimeter of the frame of the fenestration unit (where Hunter discloses using an adhesive on all of the joints and along the entire joint of the panel).

Regarding claims 32-34: Where applicant admits in the specification that it is known in the art to attach a fin on the frame of the fenestration unit to an outer surface of an outer layer of the composite panel and locating a sealant material between the fin and the outer surface of the outer layer and attaching the fin to the outer layer using fasteners.

Regarding claim 35: The wall structure of claim 22 comprising recesses located in the perimeter of the frame adapted to receive the foam material (Hunter, figure 4).

Regarding claim 37: The wall structure of claim 22 wherein the insulating core comprises a polymeric foam material (Col. 3, lines 36-40).

Regarding claim 38: Applicant admits in the specification that it is known in the art to have a composite panel having an insulating core, and Record, Holloway, Jonas and applicant (spec page 1) all disclose insulating panels for wall construction having a insulating core between two rigid layers, and fenestration unit installed in the panel (where it is inherent that the opening would be larger than the fenestration unit).

Hunter discloses insulating foam core panels for use in barrier construction of a building where the panels are secured and attached using a foam adhesive (17) which is delivered into a space between the panels and fixedly adheres the foam cores together and is the primary structural attachment.

It would have been obvious at the time the invention was made to modify the already known method of installing a fenestration unit in panel, as disclosed above, to include using a foam adhesive around at least a portion of the perimeter of the unit to secure the unit and panel because the foam adhesive provides a secure connection that

Art Unit: 3633

further protects from water/moisture damage and provides additional insulation at an area that is known to require insulation (a fenestration opening in a wall/panel).

Regarding claims 39-42: Applicant admits in the specification that it is known in the art to have a composite panel having an insulating core and fenestration unit installed in the panel.

Hunter discloses insulating foam core panels for use in barrier construction of a building where the panels are secured and attached using a foam adhesive (17), that is compatible with the material of the panel which is delivered into a space between the panels and fixedly adheres the foam cores together and is the primary structural attachment (Col. 2, line 44-45).

It would have been obvious at the time the invention was made to modify the already known method of installing a fenestration unit in panel to include using a foam adhesive around at least a portion of the perimeter of the unit to secure the unit and panel because the foam adhesive provides a secure connection that further protects from water/moisture damage and provides additional insulation at an area that is known to require insulation (a fenestration opening in a wall/panel).

Regarding claim 43-44: The limitation in the claims regarding the percentage (ranging in the various dependent claims from 50-80%) appears to be a mere matter of design choice, which fails to patentably distinguish over the prior art. Applicant has disclosed that several percentages would be acceptable, including that the adhesive provides the sole structural support and that it provides a mere 50% of the attachment force. Such a range is clearly indicative of a lack of criticality to the instant feature.

Art Unit: 3633

Moreover it appears that a foam adhesive that provides at least 50% of the attachment force either by itself or in combination with other fastening means, or one that provides 80%, or 100% would be acceptable and within the scope of applicants invention. The panel as in claim 1 with the foam adhesive as taught by Hunter would provide for at least 50% of the attachment force.

Regarding claim 46: The panel of claim 39 wherein the insulating core comprises a polymeric foam material (Col. 3, lines 36-40).

Regarding claims 15, 36, 45: Examiner takes official notice that it is common and well known to use an intermediate adhesion promoting material when applying an adhesive layer to a material to be adhered to another material, and that as such it would have been obvious to one of ordinary skill in the art to apply such a material to the perimeter of the frame to provide a more secure adhesive connection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3633

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica Laux whose telephone number is 571-272-8228. The examiner can normally be reached on Monday thru Thursday, 9:00am to 5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeanette E Chapman/
Primary Examiner, Art Unit 3633

/J. L./
Examiner, Art Unit 3635
03/13/2008